

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No.	:	7,482,417	Application No.	10/505,346
Inventors	:	Kiyosada et al.	Confirmation No.	5911
Issued	:	January 27, 2009		
Title	:	Papermaking Chemical, Method For Manufacturing Same, And Paper Containing Same		
Examiner	:	Michael M. Bernshteyn		
Customer No.	:	28289		

REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT
FOR PTO MISTAKE (37 C.F.R. 1.322(a))

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

ATTENTION: Decision and Certificate of Correction Branch
Patent Issue Division

Sir:

In accordance with 35 U.S.C. § 254, we attach hereto Form PTO/SB/44 and a copy of proof of PTO errors and request that a Certificate of Correction be issued in the above-identified patent. The following errors appear in the patent as printed:

Column 1, Line 17, "papermeaking" should read – papermaking –
(See the Preliminary Amendment dated August 20, 2004, page 2, first replacement paragraph, line 8.)

Column 40, Claim 1, line 49, " R^2 or R^4 " should read – R^2 to R^4 –
(See the Amendment dated July 25, 2008, page 4, Claim 16, as shown with the Examiner's Amendments. Claim 16 issued as Claim 1.) See also the Examiner's Amendment accompanying the Notice of Allowability which sets forth the Examiner's Amendments to Claims 16, 29, 30 and 34. Claims 16, 29, 30 and 34 issued as Claims 1, 2, 7, and 11 respectively.

Column 40, Claim 1, line 50, "acid);;" should read – acid; –
(See the Amendment dated July 25, 2008, page 2, Claim 16, as shown with the Examiner's Amendments. Claim 16 issued as Claim 1.)

Column 41, line 8 of Claim 2, " R^2 or R^4 " should read – R^2 to R^4 –
(See the Amendment dated July 25, 2008, page 6, Claim 29, as shown with the Examiner's Amendments. Claim 29 issued as Claim 2.)

Column 41, line 9 of Claim 2, "acid);;" should read – acid; –
(See the Amendment dated July 25, 2008, page 6, Claim 29, as shown with the Examiner's Amendments. Claim 29 issued as Claim 2.)

I certify that this correspondence is being electronically
submitted to the United States Patent and Trademark
Office on April 29, 2009.

04/29/2009
Date

Signature

Mary Jo Sinicrope

(Typed Name of Person Signing Certificate)

Column 41, line 21 of Claim 3, "are adding" should read – are added –
(See the Amendment dated July 25, 2008, page 4, Claim 17, line 5. Claim 17 issued as Claim 3.)

Column 41, line 26 of Claim 4, "ethylurea" should read – ethyleneurea –
(See the Amendment dated July 25, 2008, page 5, Claim 23, line 4. Claim 23 issued as Claim 4.)

Column 41, lines 31-32 of Claim 5, "thiourea, ethylurea, ethyleneurea" should read
– thiourea, ethyleneurea –
(See the Amendment dated July 25, 2008, page 5, Claim 25, line 4. Claim 25 issued as Claim 5.)

Column 41, line 40 of Claim 7, "monomer (ci)" should read – monomer (c1) –
(See the Amendment dated July 25, 2008, page 7, line 1 of Claim 30. Claim 30 issued as Claim 7.)

Column 41, line 52 of Claim 7, "each group independently" should read – each independently –
(See the Amendment dated July 25, 2008, page 7, Claim 30, as shown with the Examiner's Amendments.
Claim 30 issued as Claim 7.)

Column 41, line 59 of Claim 7, "and X⁻ is an inorganic acid or an anion of an organic acid);" should read
– and X⁻ is an anion of an inorganic acid or an organic acid; –
(See the Amendment dated July 25, 2008, page 7, Claim 30, as shown with the Examiner's Amendments.
Claim 30 issued as Claim 7.)

Column 42, line 11 of Claim 9, "ethylenethiourea" should read – ethylenethiourea –
(See the Amendment dated July 25, 2008, page 7, Claim 32, line 4. Claim 32 issued as Claim 9.)


Column 42, lines 41 and 42 of Claim 11, "and X⁻ is an inorganic acid or an anion of an organic acid);" should
read – and X⁻ is an anion of an inorganic acid or an organic acid; –
(See the Amendment dated July 25, 2008, page 8, Claim 34, as shown with the Examiner's Amendments.
Claim 34 issued as Claim 11.)

Column 42, line 44 of Claim 11, "(ineth)" should read – (meth) –
(See the Amendment dated July 25, 2008, page 8, Claim 34, as shown with the Examiner's Amendments.
Claim 34 issued as Claim 11.)

Column 42, line 62 of Claim 14, "auanidyl urea" should read – guanidyl urea –
(See the Amendment dated July 25, 2008, page 9, Claim 37, line 4. Claim 37 issued as Claim 14.)

Respectfully submitted,

THE WEBB LAW FIRM

By 
Ann M. Cannoni
Registration No. 35,972
Attorney for Registrants
700 Koppers Building
436 Seventh Avenue
Pittsburgh, PA 15219
Telephone: (412) 471-8815
Facsimile: (412) 471-4094
E-mail: webblaw@webblaw.com

UNITED STATES PATENT AND TRADEMARK OFFICE **CERTIFICATE OF CORRECTION**

Page 1 of 2

PATENT NO. : 7,482,417
 APPLICATION NO. : 10/505,346
 ISSUE DATE : January 27, 2009
 INVENTORS : Kiyosada et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 1, Line 17, "papermeaking" should read – papermaking –

Column 40, Claim 1, line 49, "R² or R⁴" should read – R² to R⁴ –

Column 40, Claim 1, line 50, "acid);," should read – acid; –

Column 41, line 8 of Claim 2, "R² or R⁴ " should read – R² to R⁴ –

Column 41, line 9 of Claim 2, "acid);," should read – acid; –

Column 41, line 21 of Claim 3, "are adding" should read – are added –

Column 41, line 26 of Claim 4, "ethylurea" should read – ethyleneurea –

Column 41, lines 31-32 of Claim 5, "thiourea, ethylurea, ethleneurea" should read – thiourea, ethyleneurea –

MAILING ADDRESS OF SENDER: The Webb Law Firm
 700 Koppers Building
 436 Seventh Avenue
 Pittsburgh, PA 15219

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-2450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select Option 2.

**UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION**

Page 2 of 2

PATENT NO. : 7,482,417
APPLICATION NO. : 10/505,346
ISSUE DATE : January 27, 2009
INVENTORS : Kiyosada et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 41, line 40 of Claim 7, "monomer (ci)" should read – monomer (c1) –

Column 41, line 52 of Claim 7, "each group independently" should read
– each independently –

Column 41, line 59 of Claim 7, "and X⁻ is an inorganic acid or an anion of an organic acid);" should read – and X⁻ is an anion of an inorganic acid or an organic acid; –

Column 42, line 11 of Claim 9, "ethvlenethiourea" should read – ethylenethiourea –

Column 42, lines 41 and 42 of Claim 11, "and X⁻ is an inorganic acid or an anion of an organic acid);" should read – and X⁻ is an anion of an inorganic acid or an organic acid; –

Column 42, line 44 of Claim 11, "(ineth)" should read – (meth) –

Column 42, line 62 of Claim 14, "auanidyl urea" should read – guanidyl urea –

MAILING ADDRESS OF SENDER: The Webb Law Firm
700 Koppers Building
436 Seventh Avenue
Pittsburgh, PA 15219

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-2450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select Option 2.

Application No. Not Yet Assigned
Paper Dated: August 20, 2004
In Reply to USPTO Correspondence of N/A
Attorney Docket No. 1852-044862

Customer No. 28289

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : Not Yet Assigned
Applicants : Toshitsugu KIYOSADA et al.
Filed : Concurrently Herewith
Title : (METH)ACRYLAMIDE POLYMER,
: PROCESS FOR PRODUCTION THEREOF,
: PAPER MAKING CHEMICALS, PAPERS
: CONTAINING THE SAME
International Application : No. PCT/JP03/01918
International Filing Date : 21 February 2003
Priority Date Claimed : 22 February 2002

MAIL STOP PCT
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

PRELIMINARY AMENDMENT

Sir:

Prior to initial examination, please amend the above-identified patent application as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims begin on page 7 of this paper.

Remarks begin on page 11 of this paper.

AMENDMENTS TO THE SPECIFICATION

Please replace the title on page 1 with the following new title:

~~(METH)ACRYLAMIDE POLYMER, PROCESS FOR PRODUCTION THEREOF,
PAPER-MAKING CHEMICALS, PAPERS CONTAINING SAME~~
PAPERMAKING CHEMICAL, METHOD FOR MANUFACTURING SAME, AND
PAPER CONTAINING SAME

Please replace the heading on page 1 before the first complete paragraph with the following section headings:

TECHNICAL FIELD -- BACKGROUND OF THE INVENTION

Field of the Invention --

Please replace the first complete paragraph on page 1 with the following replacement paragraph:

5 This invention relates to a ~~(meth)acrylamide polymer~~papermaking chemical, a method for manufacturing this ~~(meth)acrylamide polymer~~, a papermaking chemical, and paper containing the same, and more particularly relates to a papermaking chemical exhibiting an excellent paper strengthening effect, drainage improvement effect, retention improvement effect,
plybond strength enhancing effect, surface strength enhancing effect, and sizing improvement effect in acid, neutral, or alkaline papermaking systems; a ~~(meth)acrylamide polymer~~ capable of
forming this papermaking chemical; a method for manufacturing this a papermaking chemical
10 containing a (meth)acrylamide polymer; with which this papermaking chemical can be formed; and paper that makes use of this (meth)acrylamide polymer and as a result has excellent bursting strength, internal bond strength, and other such properties.

Please replace the first complete paragraph on page 2 with the following replacement paragraph:

Various kinds of papermaking chemicals have been used in the papermaking process in the past for the purpose of raising productivity through ~~with high-speed paper machines~~higher machinery speed, or improving the paper quality. (Meth)acrylamide polymers are especially important chemicals in terms of improving paper quality and raising productivity, and as such these chemicals are being used in an increasingly wide range of applications and continue to be improved.

Application No. 10/505,346
Paper Dated: July 25, 2008
In Reply to USPTO Correspondence of March 25, 2008
Attorney Docket No. 1852-044862

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/505,346 Confirmation No. 5911
Applicants : Toshitsugu Kiyosada et al.
Filed : July 20, 2005
Title : Papermaking Chemical, Method for Manufacturing
Same, and Paper Containing Same
Group Art Unit : 1796
Examiner : Michael M. Bernshteyn
Customer No. : 28289

Mail Stop AF
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT

Sir:

In response to the Office Action dated March 25, 2008, Applicants submit the following amendments and remarks and Declaration of Yuji Baba, along with a Request for Continued Examination, and a one-month Petition for Extension of Time.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 10 of this paper.

I hereby certify that this correspondence is being electronically submitted to the United States Patent and Trademark Office on July 25, 2008.

07/25/2008

Date

Signature

Melissa A. Wyke

Typed Name of Person Signing Certificate

AMENDMENTS TO THE CLAIMS

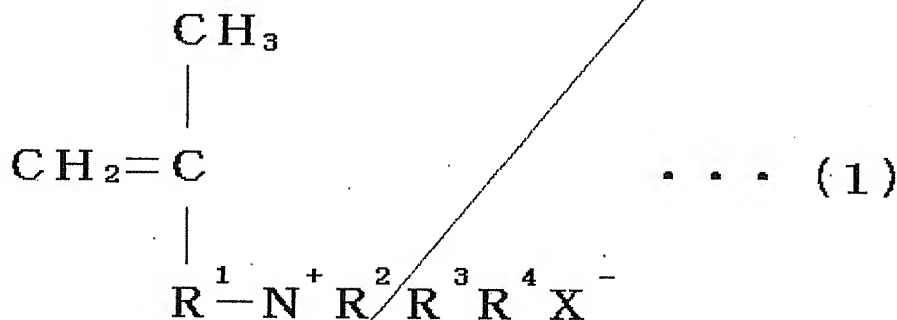
This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

Claims 1-11 (Cancelled).

Claim 12 (Withdrawn): A papermaking chemical containing a (meth)acrylamide polymer, produced by polymerizing a monomer (a) expressed by the following general formula 1, the following monomer (b), and the following monomer (c):

(a) general formula 1:



(where R¹ is a C₁ to C₄ alkylene group, R² to R⁴ are each a hydrogen atom or C₂₂ or lower alkyl group that may have a substituent (two or three of R² to R⁴ may not be hydrogen atoms), and X⁻ is an anion of an inorganic acid or an organic acid);

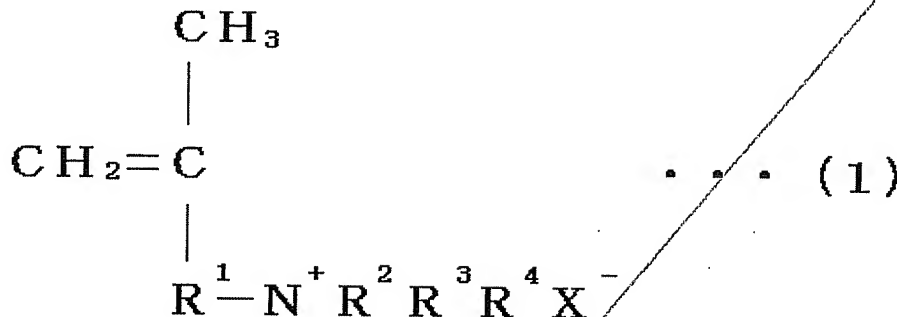
(b) a (meth)acrylamide;

(c) an ionic monomer other than monomer (a) expressed by general formula 1 above.

Claim 13 (Withdrawn): A papermaking chemical containing a (meth)acrylamide polymer, produced by polymerizing a monomer (a) expressed by the following general formula 1, the following monomer (b), the following monomer (c), and a crosslinking agent (d):

*Cancelled
per
Ex. Amend.
accompanying
NO A
mailing
10/24/2008*

(a) general formula 1



—(where R¹ is a C₁ to C₄ alkylene group, R² to R⁴ are each a hydrogen atom or C₂₂ or lower alkyl group that may have a substituent (two or three of R² to R⁴ may not be hydrogen atoms), and X⁻ is an anion of an inorganic acid or an organic acid);

(b) a (meth)acrylamide;

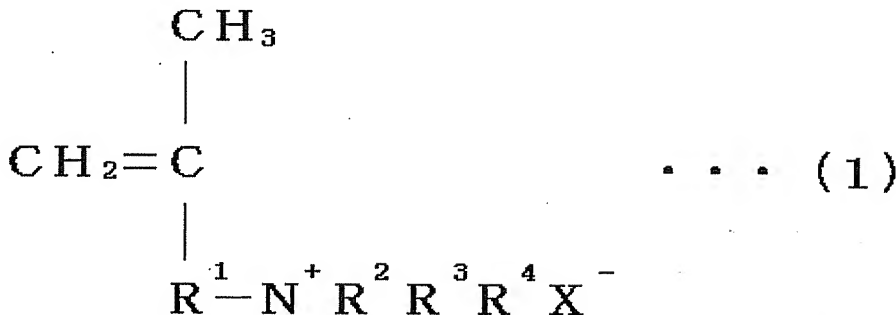
(c) an ionic monomer other than monomer (a) expressed by general formula 1 above.

Claim 14 (Withdrawn): The method for manufacturing the papermaking chemical containing a (meth)acrylamide polymer according to claim 12, wherein at least one member selected from the group consisting of the monomer (a), monomer (b), and monomer (c) is polymerized, and the remaining monomers are added during this polymerization.

Claim 15 (Withdrawn): The method for manufacturing the papermaking chemical containing a (meth)acrylamide polymer according to claim 13, wherein at least one member selected from the group consisting of the monomer (a), monomer (b), monomer (c), and crosslinking agent (d) is polymerized, and the remaining monomers are added during this polymerization.

1.
 Claim 16 (Previously Presented): A papermaking chemical, containing a (meth)acrylamide polymer produced by polymerizing a monomer (a) expressed by the following general formula 1, the following monomer (b), the following monomer (c1), the following monomer (c2), and a crosslinking agent (d):

(a) general formula 1:



(where R¹ is a C₁ to C₄ alkylene group, R² to R⁴ are each independently selected from the group consisting of a hydrogen atom, a C₁ to C₂₂ or lower alkyl group, a C₂₂ or lower hydroxyalkyl group, a C₂₂ or lower alkylamine group, a C₂₂ or lower alkyl ether group, a C₂₂ or lower alkyl ester group, a C₂₂ or lower alkylamide group, a C₂₂ or lower aryl group or a group that has a cyclic structure when any two of R² to R⁴ bond together, that may have a substituent two or three of R² to R⁴ may not be hydrogen atoms), and X⁻ is an anion of an inorganic acid or an organic acid);

(b) a (meth)acrylamide;

(c1) a (meth)allylsulfonic acid (salt);

(c2) an ionic monomer other than the monomer (a) and the monomer (c1).

Claim ~~317~~³ (Previously Presented): The method for manufacturing the papermaking chemical containing a (meth)acrylamide polymer according to claim ~~29~~², wherein at least one member is selected from the group consisting of the monomer (a), the monomer (b), the monomer (c1), the monomer (c2), and the crosslinking agent (d) is polymerized, and the remaining monomers and/or the crosslinking agent are added during this polymerization.

Claim 18 (Withdrawn): The papermaking chemical, containing a (meth)acrylamide polymer according to claim 12, wherein the polymerization is conducted in the presence of a urea compound.

Claim 19 (Withdrawn): The method for manufacturing a papermaking chemical containing a (meth)acrylamide polymer according to claim 14, wherein the polymerization is conducted in the presence of a urea compound.

Claim 20 (Withdrawn): The papermaking chemical, wherein the papermaking chemical containing a (meth)acrylamide polymer according to claim 12, is a paper strength agent.

Cancelled
Claim 21 (Withdrawn): Paper containing the papermaking chemical according to claim 20.

Claim 22 (Withdrawn): The papermaking chemical containing a (meth)acrylamide polymer according to claim 13, wherein the polymerization is conducted in the presence of a urea compound.

Cancelled
5 ^{4.} Claim 23 (Currently Amended): The papermaking chemical containing a (meth)acrylamide polymer according to claim 16, wherein the polymerization is conducted in the presence of a of at least one urea compound selected from the group consisting of urea, thiourea, ethyleneurea, ethylenethiourea, phosphates of guanidyl urea, and sulfates of guanidyl urea.

Cancelled
Claim 24 (Withdrawn): The method for manufacturing a papermaking chemical containing a polymer according to claim 15, wherein the polymerization is conducted in the presence of a urea compound.

Cancelled
5 ^{5.} Claim 25 (Currently Amended): The method for manufacturing a papermaking chemical containing a polymer according to claim ³17, wherein the polymerization is conducted in the presence of a of at least one urea compound selected from the group consisting of urea, thiourea, ethyleneurea, ethylenethiourea, phosphates of guanidyl urea, and sulfates of guanidyl urea.

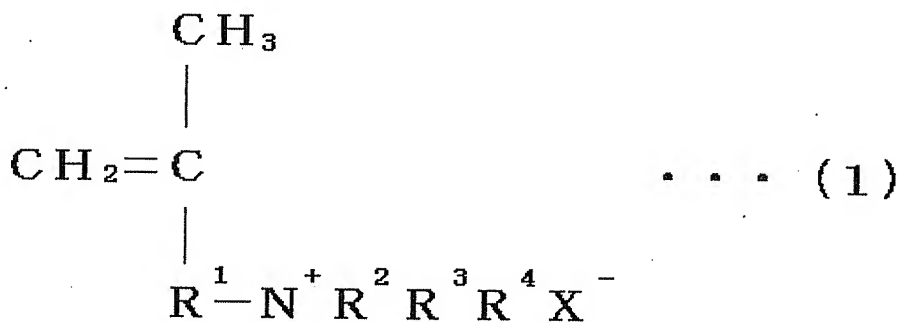
Cancelled
Claim 26 (Withdrawn): The papermaking chemical, wherein the papermaking chemical containing a (meth)acrylamide polymer according to claim 13 is a paper strength agent.

^{6.}
 Claim ~~27~~ (Previously Presented): The papermaking chemical, wherein the papermaking chemical containing a (meth)acrylamide polymer according to claim ~~16~~ is a paper strength agent.

Cancelled
 Claim 28 (Withdrawn): The papermaking chemical, wherein the papermaking chemical containing a (meth)acrylamide polymer according to claim 18 is a paper strength agent.

^{2.}
 Claim ~~29~~ (Previously Presented): A method for manufacturing a papermaking chemical containing a (meth)acrylamide polymer, which comprises polymerizing a monomer (a) represented by formula (1):

the monomer (a) is represented by formula 1:



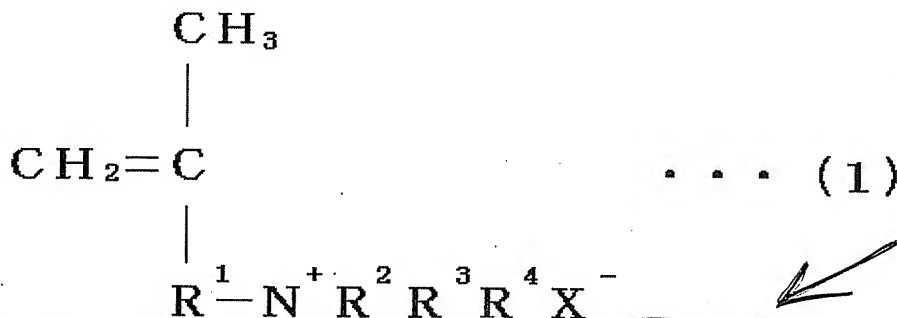
*Per
 of Amend.*
 (where R¹ is a C₁ to C₄ alkylene group, R² to R⁴ are each independently selected from the group consisting of a hydrogen atom, a C₁-C₂₂ or lower alkyl group, a C₂₂ or lower hydroxyalkyl group, a C₂₂ or lower alkylamine group, a C₂₂ or lower alkyl ether group, a C₂₂ or lower alkyl ester group, a C₂₂ or lower alkylamide group, a C₂₂ or lower aryl group or a group that has a cyclic structure when any two of R² to R⁴ bond together, that may have a substituent two or three of R² to R⁴ may not be hydrogen atoms), and X⁻ is an anion of an inorganic acid or an organic acid);

- a (meth)acrylamide, as monomer (b);
- a (meth)allylsulfonic acid (salt), as monomer (c1);
- an ionic monomer other than the monomer (a) and the monomer (c1), as monomer (c2); and
- a cross linking agent (d).

^{7.}
 Claim ~~30~~ (Previously Presented): A method of reducing viscosity of polymers used in papermaking, which comprises polymerizing a monomer (a) expressed by formula 1,

with the following monomer (b), the following monomer (c1), the following monomer (c2), and a crosslinking agent (d):

(a) formula 1



See Ex. Amend.

(where R¹ is a C₁ to C₄ alkylene group, R² to R⁴ are each independently selected from the group consisting of a hydrogen atom, a C₁-C₂₂ or lower alkyl group, a C₂₂ or lower hydroxyalkyl group, a C₂₂ or lower alkylamine group, a C₂₂ or lower alkyl ether group, a C₂₂ or lower alkyl ester group, a C₂₂ or lower alkylamide group, a C₂₂ or lower aryl group or a group that has a cyclic structure when any two of R² to R⁴ bond together, that may have a substituent two or three of R² to R⁴ may not be hydrogen atoms), and X⁻ is anion of an inorganic acid or an organic acid);

(b) a (meth)acrylamide;

(c1) a (meth)allylsulfonic acid (salt);

(c2) an ionic monomer other than the monomer (a) and the monomer (c1),

thereby producing a (meth)acrylamide polymer.

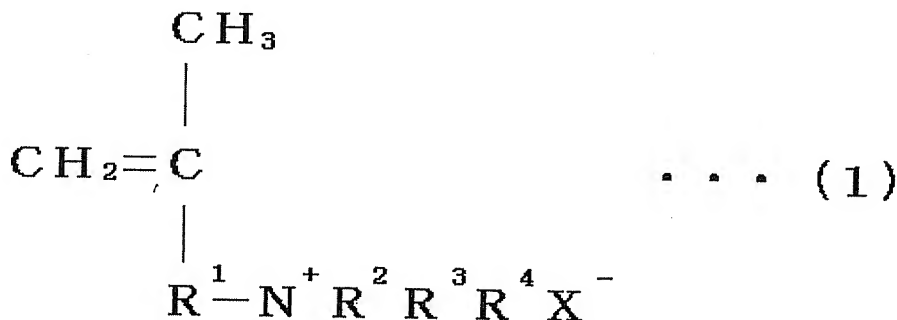
Claim 31 (Previously Presented): The method according to claim 30, wherein at least one member selected from the group consisting of the monomer (a), the monomer (b), the monomer (c1), the monomer (c2), and the crosslinking agent (d) is polymerized, and the remaining monomers and/or the crosslinking agent are added during this polymerization.

Claim 32 (Currently Amended): The method of reducing viscosity of polymers used in papermaking according to claim 30, wherein the polymerization is carried out in the presence of a of at least one urea compound selected from the group consisting of urea, thiourea, ethyleneurea, ethylenethiourea, phosphates of guanidyl urea, and sulfates of guanidyl urea.

^{10.}
 Claim ~~33~~ (Currently Amended): The method of reducing viscosity of polymers used in papermaking according to claim ⁸ ~~31~~, wherein the polymerization is carried out in the presence of ~~a~~ of at least one urea compound selected from the group consisting of urea, thiourea, ethyleneurea, ethylenethiourea, phosphates of guanidyl urea, and sulfates of guanidyl urea.

^{11.}
 Claim ~~34~~ (Previously Presented): A method of increasing paper strength, which comprises adding to a pulp slurry a papermaking chemical containing a (meth)acrylamide polymer produced by polymerizing a monomer (a) expressed by general formula 1, the following monomer (b), the following monomer (c1), the following monomer (c2), and a crosslinking agent (d):

(a) general formula 1



(where R¹ is a C₁ to C₄ alkylene group, R² to R⁴ are each independently selected from the group consisting of a hydrogen atom, a C₁-C₂₂ or lower alkyl group, a C₂₂ or lower hydroxyalkyl group, a C₂₂ or lower alkylamine group, a C₂₂ or lower alkyl ether group, a C₂₂ or lower alkyl ester group, a C₂₂ or lower alkylamide group, a C₂₂ or lower aryl group or a group that has a cyclic structure when any two of R² to R⁴ bond together, that may have a substituent two or three of R² to R⁴ may not be hydrogen atoms), and X⁻ is an anion of an inorganic acid or an organic acid);

(b) a (meth)acrylamide;

(c1) a (meth)allylsulfonic acid (salt);


(c2) an ionic monomer other than the monomer (a) and the monomer (c1).

^{12.}
 Claim ~~35~~ (Previously Presented): The method according to claim ¹¹ ~~34~~, wherein at least one member selected from the group consisting of the monomer (a), the monomer (b), the monomer (c1), the monomer (c2), and the crosslinking agent (d) is polymerized, and the remaining monomers and/or the crosslinking agent are added during this polymerization.

^{13.}
Claim ~~36~~ (Currently Amended): The method according to claim ~~34~~¹¹, wherein the polymerization is carried out in the presence of a of at least one urea compound selected from the group consisting of urea, thiourea, ethyleneurea, ethylenethiourea, phosphates of guanidyl urea, and sulfates of guanidyl urea.

^{14.}
Claim ~~37~~ (Currently Amended): The method according to claim ~~35~~¹², wherein the polymerization is carried out in the presence of a of at least one urea compound selected from the group consisting of urea, thiourea, ethyleneurea, ethylenethiourea, phosphates of guanidyl urea, and sulfates of guanidyl urea.

4



Notice of Allowability	Application No.	Applicant(s)	
	10/505,346	KIYOSADA ET AL.	
	Examiner	Art Unit	
	MICHAEL M. BERNSHTEYN	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 07/25/2008.
2. ☒ The allowed claim(s) is/are 16,17,23,25,27 and 29-37.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20080910</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

/Michael M. Bernshteyn/
Examiner, Art Unit 1796

Interview Summary	Application No.		Applicant(s)	
	10/505,346		KIYOSADA ET AL.	
	Examiner		Art Unit	
	MICHAEL M. BERNSHTEYN		1796	

All participants (applicant, applicant's representative, PTO personnel):

(1) MICHAEL M. BERNSHTEYN. (3) _____.

(2) Ms. Ann M. Cannoni (Reg.No. 35,972). (4) _____.

Date of Interview: 11 September 2008.

Type: a) ☒ Telephonic b) ☐ Video Conference
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.
If Yes, brief description: _____.

Claim(s) discussed: All the claims.

Identification of prior art discussed: No.

Agreement with respect to the claims f) ☒ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: The confirmation of amended and cancelled claims has been received.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

/Michael M. Bernshteyn/ Examiner, Art Unit 1796	
--	--

DETAILED ACTION

1. This Office Action is a response to the remarks filed on July 25, 2008. Claims 23, 25, 32, 33, 36 and 37 have been amended without prejudice; no claims have been cancelled or added.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 25, 2008 has been entered.
3. In view of amendment(s), remarks and Declaration 1.132, the rejection of claims 16, 17, 23, 25, 27 and 29-37 has been withdrawn.
4. Claims 16, 17, 23, 25, 27 and 29-37 are pending.

EXAMINER'S AMENDMENT

5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ms. Ann M. Cannoni (Reg. No. 35,972) on September 11, 2008.

6. Claims 12-15, 18-22, 24, 26 and 28 have been cancelled.

Art Unit: 1796

7. Claim 16, line 6 (after the formula (1)): delete parenthesis before the word ^{where} "wherein"; after the words "are each" insert –independently selected from the group consisting of--;

Claim 16, line 7: after the words "a hydrogen atom," delete the word "or" and insert –a--; after the words "a C₂₂ or lower alkyl group," insert – a C₂₂ or lower hydroxyalkyl group, a C₂₂ or lower alkylamine group, a C₂₂ or lower alkyl ether group, a C₂₂ or lower alkyl ester group, a C₂₂ or lower alkylamide group, a C₂₂ or lower aryl group, or a group that has a cyclic structure when any two of R² to R⁴ bond together, ---;

Claim 16, line 7: delete the words "(that may have a substituent (two or three of R² to R⁴ may not be hydrogen atoms))";

Claim 29, line 6 (after the formula (1)): delete parenthesis before the word ^{where} "wherein"; after the words "are each" insert –independently selected from the group consisting of--;

Claim 29, line 7: after the words "a hydrogen atom," delete the word "or" and insert –a--; after the words "a C₂₂ or lower alkyl group," insert – a C₂₂ or lower hydroxyalkyl group, a C₂₂ or lower alkylamine group, a C₂₂ or lower alkyl ether group, a C₂₂ or lower alkyl ester group, a C₂₂ or lower alkylamide group, a C₂₂ or lower aryl group, or a group that has a cyclic structure when any two of R² to R⁴ bond together, ---;

Claim 29, line 7: delete the words "(that may have a substituent (two or three of R² to R⁴ may not be hydrogen atoms))";

Art Unit: 1796

Claim 30, line 6 (after the formula (1)): delete parenthesis before the word ^{where} "wherein"; after the words "are each" insert –independently selected from the group consisting of--;

Claim 30, line 7: after the words "a hydrogen atom," delete the word "or" and insert –a--; after the words "a C₂₂ or lower alkyl group," insert – a C₂₂ or lower hydroxyalkyl group, a C₂₂ or lower alkylamine group, a C₂₂ or lower alkyl ether group, a C₂₂ or lower alkyl ester group, a C₂₂ or lower alkylamide group, a C₂₂ or lower aryl group, or a group that has a cyclic structure when any two of R² to R⁴ bond together, ---;

Claim 30, line 7: delete the words "(that may have a substituent (two or three of R² to R⁴ may not be hydrogen atoms))";

Claim 34, line 6 (after the formula (1)): delete parenthesis before the word ^{where} "wherein"; after the words "are each" insert –independently selected from the group consisting of--;

Claim 34, line 7: after the words "a hydrogen atom," delete the word "or" and insert –a--; after the words "a C₂₂ or lower alkyl group," insert – a C₂₂ or lower hydroxyalkyl group, a C₂₂ or lower alkylamine group, a C₂₂ or lower alkyl ether group, a C₂₂ or lower alkyl ester group, a C₂₂ or lower alkylamide group, a C₂₂ or lower aryl group, or a group that has a cyclic structure when any two of R² to R⁴ bond together, ---;

Claim 34, line 7: delete the words "(that may have a substituent (two or three of R² to R⁴ may not be hydrogen atoms))".